

**FIG. 22**

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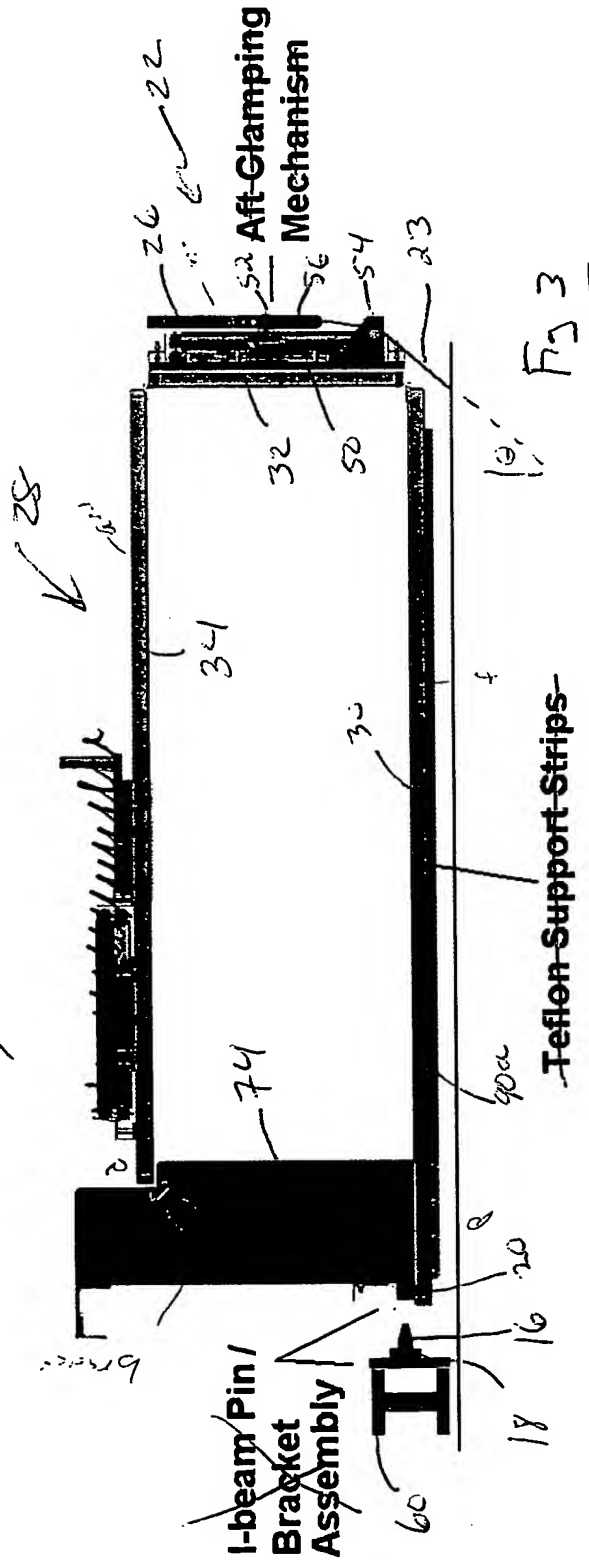
# Raytheon

# Quick-Loading Mechanism

## Network-Centric Systems

# Assembly

- Allows quick stowing/deployment of the command table
- Secures the Command Table for high loads during road course



~~I-beam Pin Assembly~~

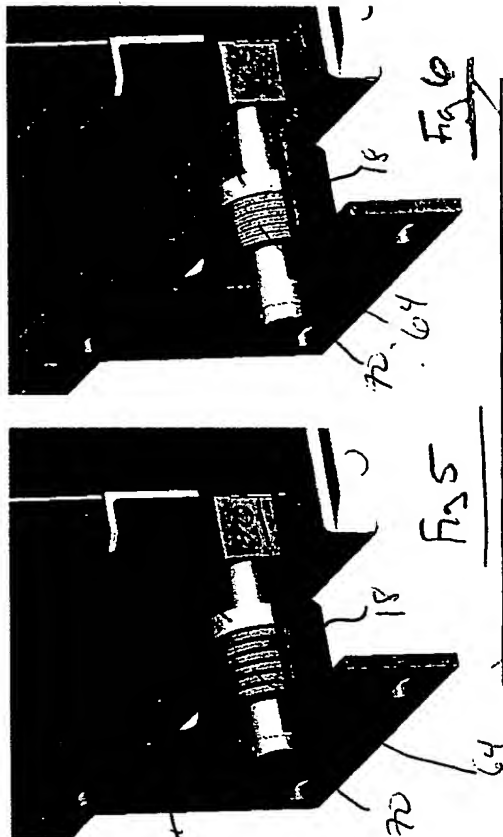


Fig 5

Fig 6

- Mates with front of folded table
- Allows for tolerance to make vertical and horizontal pre-loading easily obtainable
- Secures in vertical and transverse directions

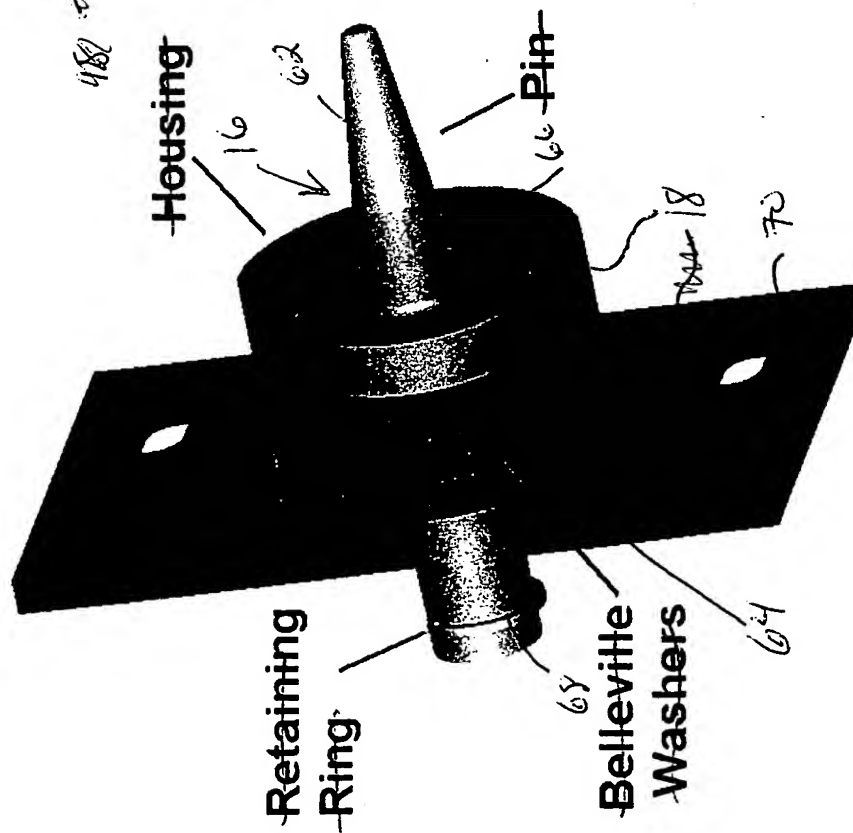


Fig 4

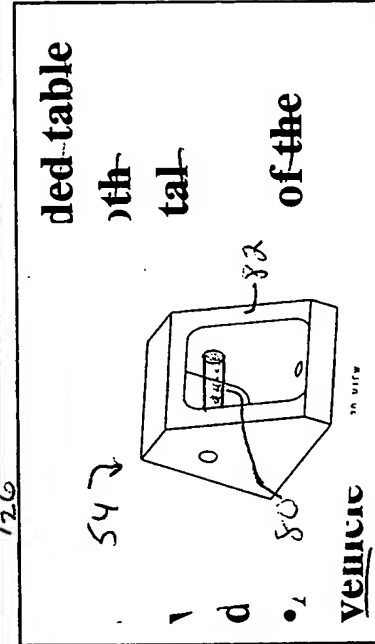
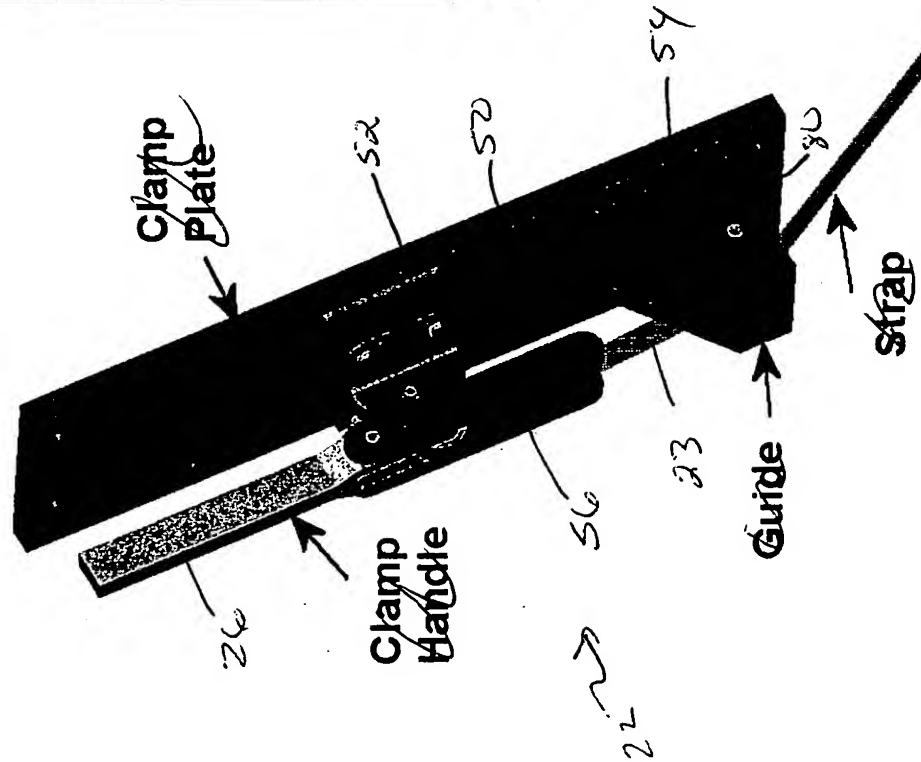
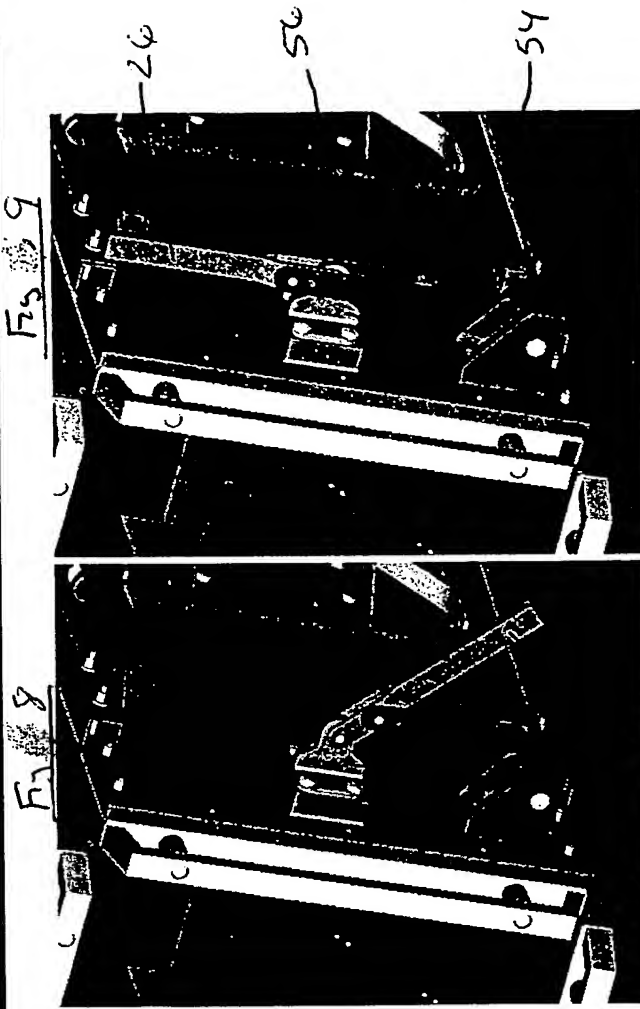


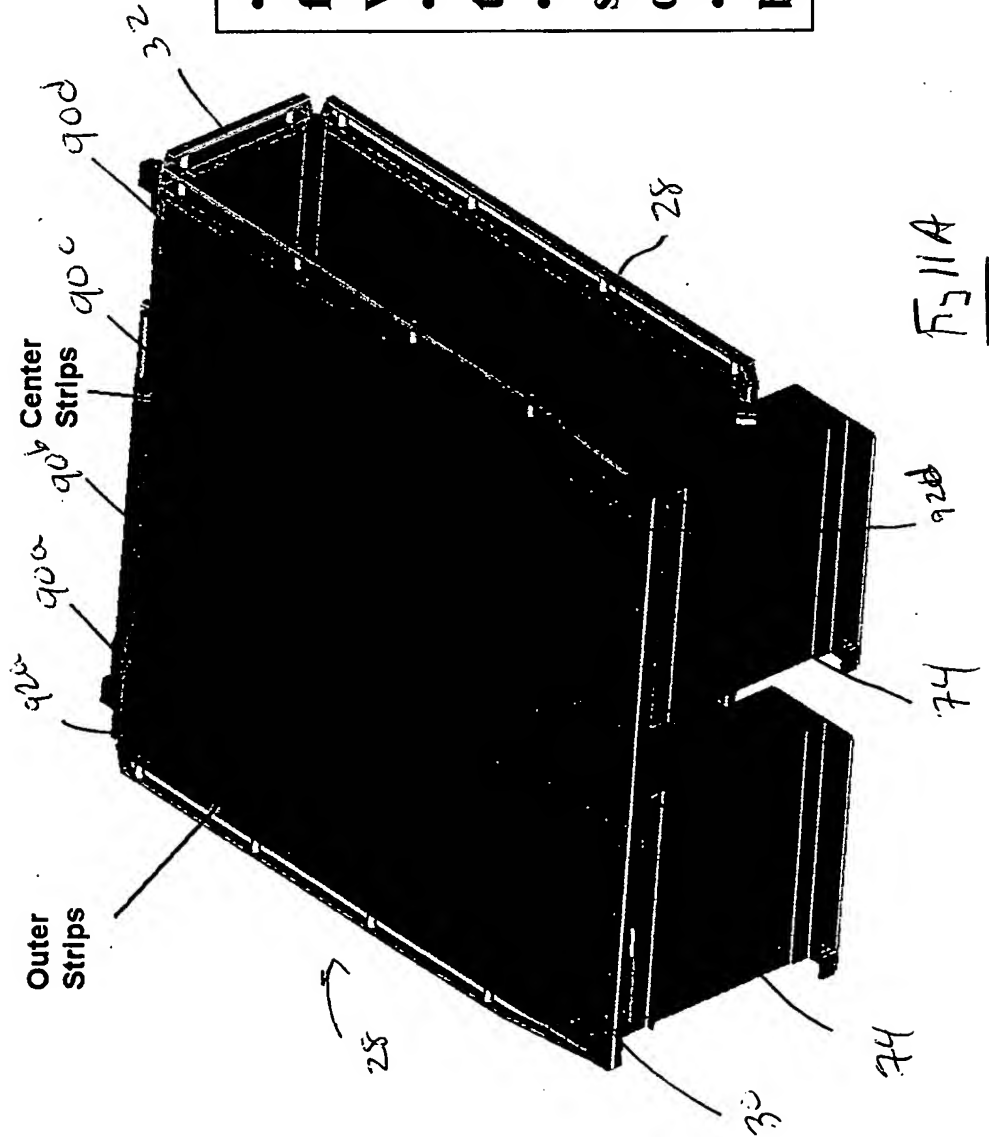
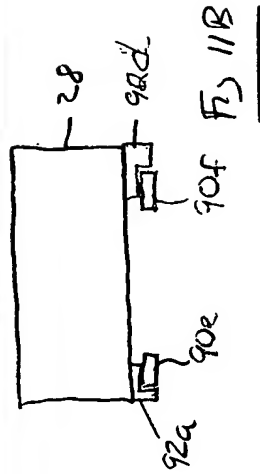
Fig 10

Fig 7

# Teflon Strips

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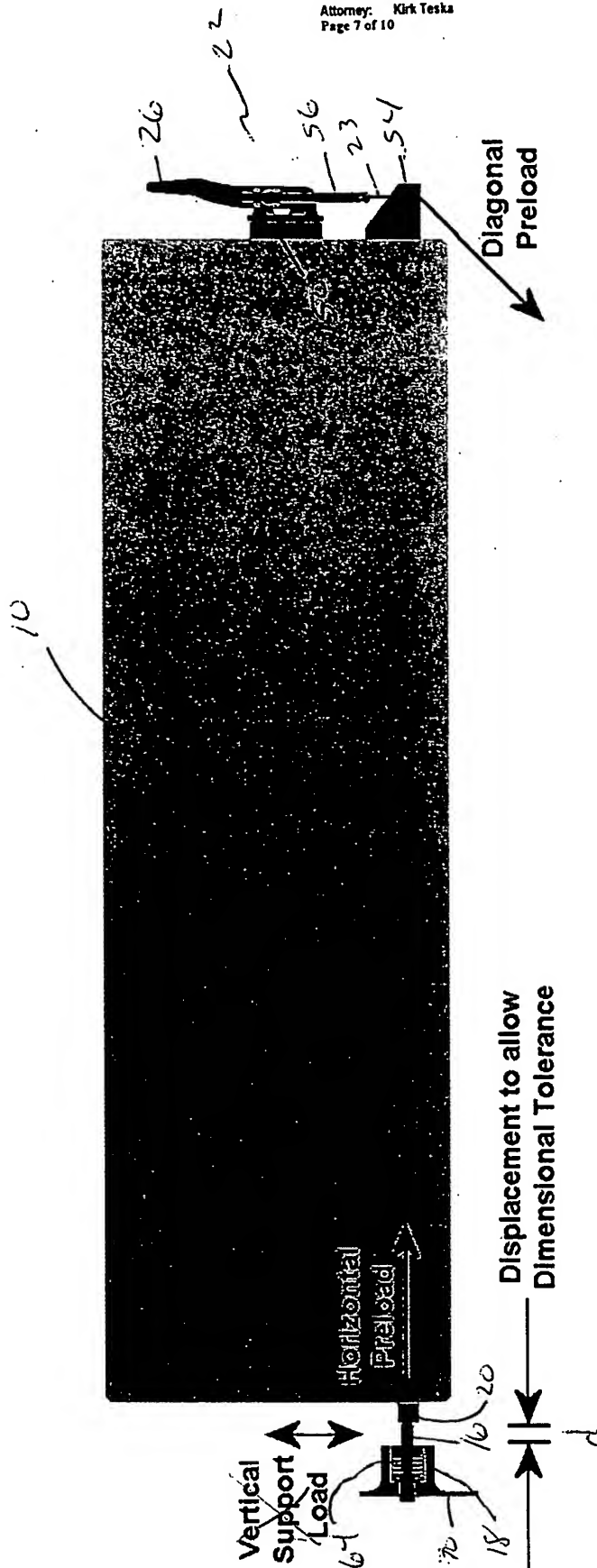


- Rests on 4 teflon strips fastened to the bed of the vehicle
- Allows low-friction sliding to remove / stow table
- Outer strips have ridges to secure table in transverse direction
- Distributes weight over the bed of the vehicle

# Quick Loading Mechanism Force Diagram

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Applicant: Antonelli et al.  
Title: LOADING SYSTEM FOR SECURING CARGO IN  
THE BED OF A VEHICLE  
Docket No.: RAY-141J  
Attorney: Kirk Teska  
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UNCLASSIFIED

Slide 4

Reaction Loads - Vertical

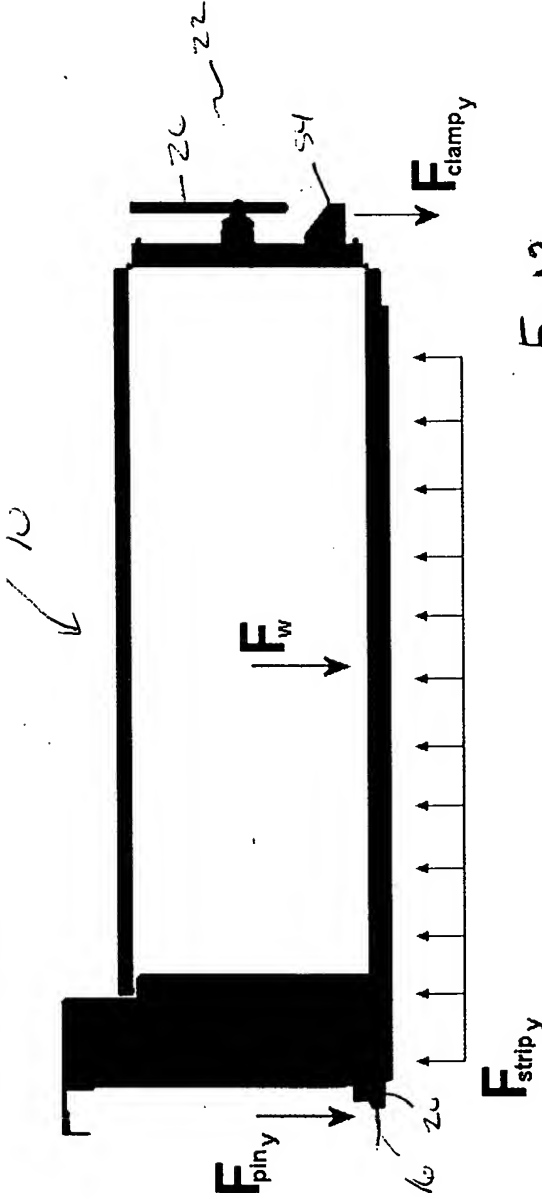
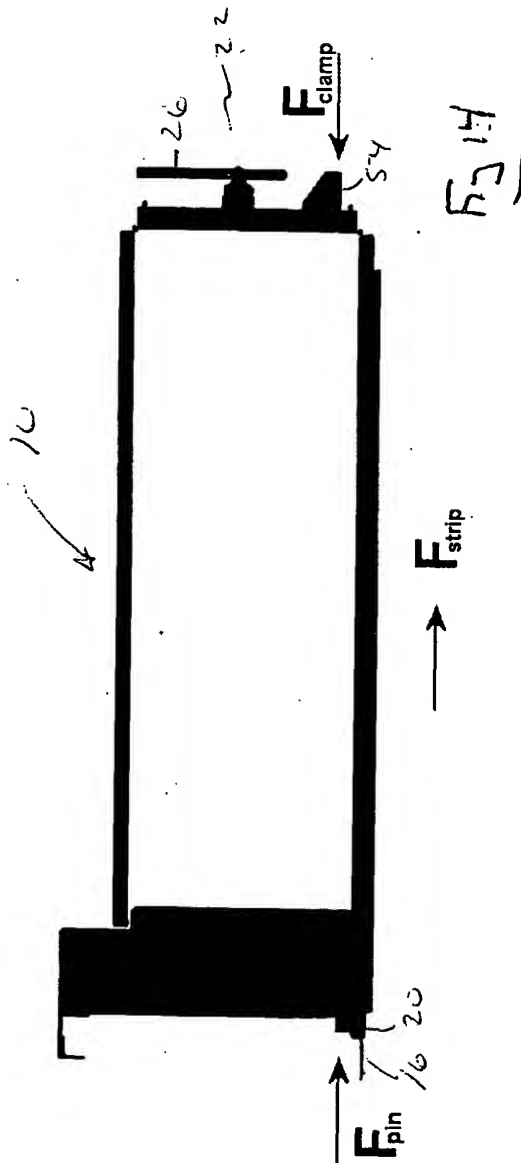


Fig 13

Acceleration	F clamps y	F strips y	F pins y	Safety Factor
-6g	-950	251	-950	3.0
6g	-950	4211	-950	3.0



# Reaction Loads - Horizontal



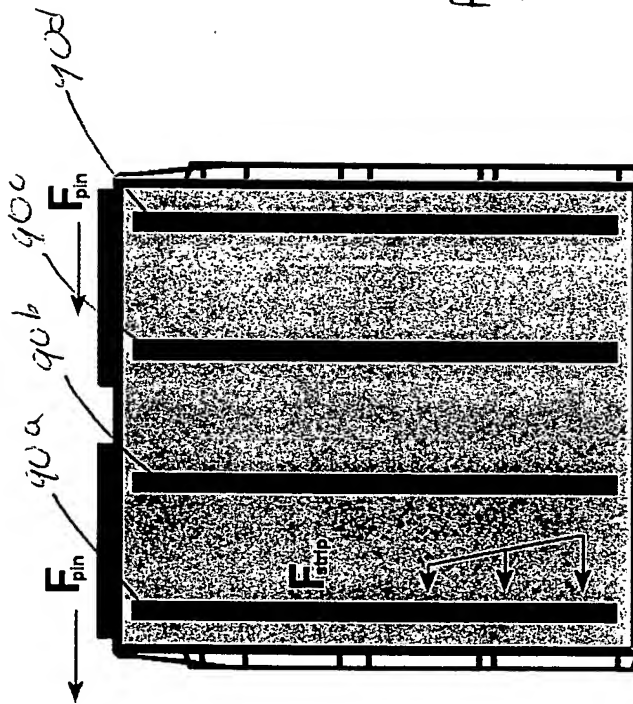
Acceleration	F pins x	F clamps x	F strips x	Safety Factor
3g	960	1891	89	1.5
3g	960	38	13	3.0

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Reaction Loads - Transverse

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Acceleration	F pin x	F strip x	Safety Factor
3g	454	536	5+
3g	454	536	5+